

THE CORRECT NAME OF THE NORTHERN EXPRESSION OF *SARRACENIA PURPUREA* L. (SARRACENIACEAE)

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ABSTRACT

Due to a lectotypification, and an inability to conserve the name and type of a taxon that impacts upon infraspecific nomenclature, the correct name for the northern expression of *Sarracenia purpurea* L. is not var. *purpurea* as traditionally understood but var. *terrae-novae* de la Pylaie. The southern expression of the species, known as var. *venosa* (Raf.) Fernald, must now be named var. *purpurea*.

KEY WORDS: *Sarracenia*, Sarraceniaceae, nomenclature

One of the guiding principles of systematics is that taxonomy drives nomenclature, not the other way around. The example presented here is one of those instances where differences in taxonomic opinion and an unfortunate lectotypification have resulted in a conflicting nomenclature.

In 1840, Rafinesque (p. 33) divided Linnaeus' (1753:510) *Sarracenia purpurea* L. into two species, listing *S. gibbosa* Raf. (under the orthography, *Sarazina*) as a new name for *S. purpurea* and then appended *S. grandiflora* Raf. as an alternative for that. In doing so he established the concept that *S. purpurea* applied to a northern plant that occurred from Canada to Virginia. For the southern expression, Rafinesque proposed *S. venosa* Raf.; this, he said, grew from Virginia to Florida.

Sarracenia purpurea was regarded as a widespread, albeit variable species (save for the recognition of *S. heterophylla* A. Eaton at some infraspecific rank) until 1933 when Wherry recognized two subspecies, the northern subsp. *gibbosa* (Raf.) Wherry and the southern subsp. *venosa* (Raf.) Wherry. Fernald (1936:233) subsequently proposed var. *venosa*, and Wherry (1972:146) eventually corrected the name of the northern taxon to the autonym subsp. *purpurea*.

Recognition of two expressions within *Sarracenia purpurea* has not been uniformly accepted. Bell (1949) rejected the distinction, but it was accepted

by Fernald (1950), Gleason (1952), and Gleason & Cronquist (1963, 1991). In Canada, Rousseau (1974) and Taylor & MacBryde (1977) recognized var. *purpurea*, Scoggan (1978) the f. *purpurea*, and other authors (Scoggan 1957; Looman & Best 1979; Porsild & Cody 1980; Moss 1983; Hinds 1986) defined the range of *S. purpurea* so as to exclude that of the southern var. *venosa*. Authors of several recent southeastern United States floras (Radford *et al.* 1964; Duncan & Kartesz 1981; Clewell 1985) have not recognized var. *venosa*, although it was accepted by Murry & Urbatsch (1979). A distinction between the two has long been championed by Schnell (1976, 1979, 1981) and this was accepted by Kartesz & Kartesz (1980).

One of the mysteries associated with the Linnaean herbarium is the lack of Linnaeus' specimens of *Sarracenia*. There was a genus folder but no specimens when James E. Smith purchased the herbarium (Jackson 1907). Linnaeus likely had herbarium material since *S. purpurea* was collected by Kalm (UPS), and the plant had been in cultivation since the early 1600s (Juniper *et al.* 1989:14). Nonetheless, no original Linnaean herbarium material has ever been traced. (The Kalm sheet can not be considered original material as there is no evidence that Linnaeus examined the sheet.)

Without any available specimens, McDaniel (1971:26) lectotypified *Sarracenia purpurea* on a Catesby (1738: t. 70) plate of var. *venosa*, one of only two available elements from which a selection could be made, the other being the Plukenet (1705: t. 376, f. 6; voucher: H.S. 90:59, BM-SL) figure selected by Wherry (1933:2) as the neotype (as "type"; Art. 8.3; Greuter *et al.* 1988) of var. *venosa*. McDaniel, who did not distinguish varieties, recognized that because of his typification, the northern element, if such were distinguished, would have to be called var. *terrae-novae* de la Pylaie (1827:389); however, this name has not been adopted by any modern author.

Before urging the adoption of the de la Pylaie name, should one wish to distinguish between the two expressions, a conservation proposal was prepared and submitted for review by members of the Spermatophyte Committee in the hopes of being able to conserve the name and the type of *Sarracenia purpurea* on the northern expression represented by the Kalm sheet. The argument was that the infraspecific autonym *purpurea* "has been widely and persistently used for a taxon or taxa not including its type ..." (Art. 63) since 1971 when McDaniel lectotypified *S. purpurea* upon the southern var. *venosa*.

In this case, the effect on the rank of the taxon in question was not at the specific level, for which conservation was requested, but at an autonymic infraspecific rank, and then only when a taxonomic distinction is made between two expressions of questionable merit. In this case conservation is not possible as the type of the species (the southern expression) is still representative of the species, and therefore the specific name can not be considered under any provision in the current *Code* (Greuter *et al.* 1988) as *Sarracenia purpurea* has not been misapplied, only a variant of it has been misapplied.

If the proposal could have been adopted, the application of *Sarracenia purpurea* would have continued as currently understood in the popular (e.g., Cheers 1983; Slack 1986; McKeown 1991), garden (Hindle 1991), and technical systematic literature when the species is divided into a northern var. *purpurea* and a southern var. *venosa*. As such a proposal can not even be considered, the northern variant must be called var. *terra-novae* de la Pylaie, a name heretofore not taken up. If one were to recognize the taxon at the subspecific rank, a new combination is necessary.

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